

## ABSTRACT

A casting machine furnace apparatus that includes a furnace adapted to receive molten metal is described herein. The furnace includes an outer wall structure, a cover adapted to seal the furnace, a source of fluid, and a casting apparatus in fluid communication with the molten metal. The fluid is supplied into the furnace for applying fluid pressure on the molten metal. The application of fluid pressure on the molten metal causes the molten metal to supply the casting apparatus. The outer wall structure of the furnace is provided with a plurality of exhaust ports where the ports are provided in the outer wall structure at predetermined locations. The ports are selectively controllable between a first closed position, where the exhaust ports do not allow air to be exhausted from the furnace, and a second opened position, where the exhaust ports enable air to be exhausted from the furnace.